

AMENDMENTS TO THE SPECIFICATION

1. Please amend paragraph [0035] as follows:

[0035] At the same time, the phase signal PM2 is also applied to the phase offset 523 for the fractional-N PLL modulation 500 that is used to track the carrier frequency of VCO 521. In operation, a modulated signal from the loop filter 517 is coupled to the adder 519 such that the VCO 521 operates with two signals. By using the feed-forward phase modulation through the D/A converter 513, a change in the phase gain value will result in an equivalent change in the modulation gain of VCO 521. Thus, the nonlinear effect of VCO gain drift can be adaptively compensated by predistorting the scaling value of the phase gain 511. Also, a controller 524 receives the phase-modulated baseband signal and the carrier frequency signal to produce a digital bit stream used to control a reference frequency coupled to an input of the phase detector 515.

2. Please amend paragraph [0047] as follows:

[0047] At 608, the two predistorted signals are equalized with respect to one or more common parameters. As the two signals eventually go through two different paths to control a switching-mode power amplifier and result in a time shift, as shown in FIG. 5, a time delay between the two predistorted signals are is equalized to compensate for such a time shift. Accordingly, the one or more common parameters that are used at 608 are also updated, adjusted or corrected by the feedback loop operating on a sample of the final RF signals.